

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) Coupling system between high-voltage electrical equipment composed of a connector or union assembly (1) that inserts in female connectors (5) of the high voltage equipment (4) which comprises an insulating shell (2) inside which are housed conducting elements, whose external surface is partially covered by a conducting or semi-conducting layer (3), ~~characterised in wherein~~ that it incorporates a mechanical protection device (6) independent of the union assembly (1) and the connectors (5) and disposed surrounding the semi-conducting layer (3) and in contact with said semi-conducting layer (3).
2. (Currently Amended) Coupling system between high-voltage electrical equipment according to claim 1, ~~characterised in wherein~~ that the protection device (3) consists of a conducting ring connected to earth.
3. (Currently Amended) Coupling system between high-voltage electrical equipment according to claim 2, ~~characterised in wherein~~ that the conducting ring connected to earth is metallic.
4. (Currently Amended) Coupling system between high-voltage electrical equipment according to claim 1, ~~characterised in wherein~~ that the protection device incorporates an inductive current sensor.
5. (Currently Amended) Coupling system between high-voltage electrical equipment according to claim 4, ~~characterised in wherein~~ that the current sensor consists of a Rogowski coil.
6. (Currently Amended) Coupling system between high-voltage electrical equipment according to claim 4, ~~characterised in wherein~~ that the current sensor consists of a winding (8) about a magnetic core (7).
7. (Currently Amended) Coupling system between high-voltage electrical equipment according to the ~~previous claims, characterised claim 1, wherein~~ in that the protection device (6) incorporates a capacitive voltage sensor.
8. (Currently Amended) Coupling system between high-voltage electrical equipment according to claim 1, ~~characterised in wherein~~ that the protection device (6) encompasses all the connectors (1) of the phases of the coupling system between high-voltage equipment.
9. (Currently Amended) Coupling system between high-voltage electrical equipment according to claim 8, ~~characterised in wherein~~ that the protection device (6) consists of a conducting ring connected to earth.

10. (Currently Amended) Coupling system between high-voltage electrical equipment according to claim 9, ~~characterised in~~ wherein that the conducting ring connected to earth is metallic.
11. (Currently Amended) Coupling system between high-voltage electrical equipment according to claim 8, ~~characterised in~~ wherein that it comprises a current sensor that externally encompasses all phases.
12. (Currently Amended) Coupling system between high-voltage electrical equipment according to claim 11, ~~characterised in~~ wherein that it comprises a current sensor for each phase.
13. (Currently Amended) Coupling system between high-voltage electrical equipment according to claims 8, ~~11 and 12~~, ~~characterised in~~ wherein that it incorporates voltage detection for each phase of the main circuit.